

Sockeye Briefing Document (Summer 2008 Release)

The Redfish Lake Sockeye Captive Broodstock Program, a multi-agency and tribal effort started in May 1991, was initiated to protect population genetic structure and to prevent the further decline of Idaho sockeye salmon. The program also produces eggs and fish to reintroduce to the habitat to increase population numbers. Idaho Fish and Game is working with the Bonneville Power Administration to increase the number of smolts the program releases.

Project cooperators and their responsibilities include:

Idaho Department of Fish and Game – Develops and maintains captive broodstocks. Conducts field monitoring and evaluations such as investigating the success of outplanted groups. Idaho Fish and Game genetic staff also provides genetics monitoring and support for the program such as background genetic identity analysis and development of spawning designs.

NOAA Fisheries – Shares captive broodstock fish culture responsibilities at two facilities located in Washington state.

University of Idaho – Provides genetic support for the program.

Shoshone-Bannock Tribes – Conducts habitat investigations geared toward determining the ability of nursery lakes to receive eggs and fish from the program. Conducts and evaluates lake fertilization.

Bonneville Power Administration – Provides funding and technical administration and oversight.



Between 1991 and 1998, only 16 wild sockeye salmon returned to Idaho. All of these adults were incorporated into the captive breeding program and spawned at the Eagle Fish Hatchery.

The program releases eggs and fish back to the habitat in a variety of ways. Eyed-eggs are planted in egg boxes and placed in lakes in the fall, presmolts are released directly to lakes in the fall, smolts are released to outlet streams in the spring, and prespawn adults are released to lakes in the fall. A monitoring and evaluation effort is in place to document the success of the different reintroduction strategies.

Over the eight years between 1999 and 2007, 355 hatchery-produced adult, sockeye salmon returned to the Sawtooth Valley. For comparison, in the 14 years from 1985 through 1998, 77 natural-origin sockeye salmon returned to Idaho.

Hatchery returns, to date:

Year	# Fish	Return Location
1999	7	All trapped at Sawtooth Hatchery
2000	257	119 at Redfish lake, 138 at Sawtooth Hatchery
2001	26	15 at Redfish Lake Creek, 11 at Sawtooth Hatchery
2002	22	8 at Redfish Lake Creek, 14 at Sawtooth Hatchery
2003	3	2 at Redfish Lake Creek, 1 at Sawtooth Hatchery
2004	27	3 at Redfish (2 @ Little Redfish), 23 at Sawtooth, 1 at East Fk. Salmon R.
2005	6	2 at Redfish Lake Creek, 4 at Sawtooth Hatchery
2006	3	3 at Sawtooth Hatchery
2007	4	1 at Redfish Lake Creek, 3 at Sawtooth Hatchery

2008 adult return facts

- This year's adult returns resulted primarily from smolts that migrated to the ocean in 2006. In that year, about 180,765 natural origin and hatchery-produced smolts left the Sawtooth Valley in route to the ocean.

The number of returning adults is expected to fluctuate due to many variables including: number of adults spawned in the hatchery program, hatchery spawning success, hatchery egg survival, success of different lifestage releases, and environmental conditions during the life cycle in the freshwater and ocean habitats.

- As of August 4, 2008, a total of 859 fish have migrated past Lower Granite Dam. Fish passing Lower Granite have traveled more than 450 river miles from the Pacific Ocean and must continue another 462 river miles to reach the Sawtooth Basin.
- Adults are trapped at two locations – Redfish Lake Creek and the Sawtooth Hatchery. As of August 5, a total of 80 adults have been trapped in the Stanley

Basin – 35 at Sawtooth Fish Hatchery weir on main Salmon River and 45 at the trap on Redfish Lake Creek.

- A portion of the adults captured in 2008 will be retained and spawned with hatchery reared adults at the Eagle Fish Hatchery. The balance of fish will most likely be released in Redfish Lake in early September.
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2008 adult release details and facts

- Idaho Fish and Game will release about 450 hatchery-produced adult sockeye salmon into Redfish Lake this year. These fish were produced at the Eagle Fish Hatchery and NOAA facilities in Washington. Depending on the total number of returning adults, a portion of these fish may be released to Redfish Lake for natural spawning.
- The fish release in September will spawn in October. Their progeny will migrate to the ocean in May 2010. Most of the adults produced from this year's release will return to Idaho in August 2012.

